

Research Article

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The updated check list of Dolichopodidae of Morocco (Diptera)

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Abstract: The updated check list of Dolichopodidae of Morocco (Diptera). *Cesa News* 128: 1-8.
The present paper is a review of faunistic and bibliographic data of the family Dolichopodidae from Morocco from 1913 to present time. All species which are known from Morocco are provided with data about their distribution and with references. The species list comprises 63 species belonging to 23 genera (9 subfamilies). *Liancalus virens* (Scopoli) and *Campsicnemus crinitarsis* Strobl are firstly recorded for the North Morocco.

Key words: Diptera, Dolichopodidae, check list, Morocco.

Long-legged flies are small, mostly slender, metallic green flies with large eyes, occupying entire lateral surface of head. Adult forms have a distinctive structure and a wide diversity of color, as well as other morphological features. All species of long-legged flies, where known, are predators that pursue soft-bodied prey such as springtails, oligochaete worms or larvae of flies (Marshall, 2013). Most species have supplementary feeding on flowers and are likely important specialized pollinators as suggested by their frequently elongate proboscis and nectar feeding habits.

The Dolichopodidae fauna of the world is very large. This is a geographically cosmopolitan group with approximately 7500 described species and 250 genera (Grichanov 2003, 2006, 2015). They colonize a wide variety of habitats, including rocks, tree trunks, logs, seacoasts and mudflats (Marshall, 2013). These mostly predatory flies are distributed throughout the world including the tropics and high-latitude islands and territories.

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The moroccan fauna of Dolichopodidae is insufficiently investigated and relevant literary sources on the distribution of individual species are comparatively rare. Several scattered data include only a few records documenting their discovery in Morocco (Vaillant, 1955, Boumezzough & Vaillant, 1986, Gatt, 2003, Grichanov, 2010, Grichanov & Vikhrev, 2009). The dolichopodid fauna of Morocco remains poorly known.

During the process of checking the species names of the 1998 check list (Dakki, 1998) from the point of view of recent taxonomic rearrangements and while collecting new data on the moroccan dolichopodid fauna, we came across a number of changes and an additional faunistic which deserves to be recorded in an updated checklist.

In the present paper, both background information and new data are presented and more general considerations on the updated check list are given.

The aim of this article is to record all the species known to date with additional records. We provide a total of 63 species from 23 genera, including the newly recorded species.

Material and methods

Data for the present study has been collected from a great deal of information from literature and website databases. The first check list of Moroccan Dolichopodidae (Dakki, 1998) has been recently reviewed, completed and updated. The most important other reviewed literatures are: Becker & Stein (1913); Séguy (1930); Vaillant (1952, 1955, 1956) and Boumezzough & Vaillant (1986).

The references to species geographical distribution uses the abbreviated of 7 areas covering the whole Moroccan territory: the North (**Rif**), Eastern of Morocco (**EM**), Atlantic Plains (**AP**), Middle Atlas (**MA**), High Atlas (**HA**), Anti Atlas (**AA**) and Sahara. The names of the curators are also presented in the text.

The synonyms are given only for species recorded from Morocco previously as long as this work deals with Moroccan species.

Abbreviations and collections cited: MNHN: Muséum National d'Histoire Naturelle, Rabat, Morocco, NPB: Natural Park of Bouhachem, PCKK: Private Collection Kawtar Kettani.

Results

Diaphorinae

***Aphrosylus* Haliday, 1851.**

***Aphrosylus maroccanus* Vaillant, 1955.**

Vaillant 1955, **AP**, Port Lyautey; Dakki 1998; Grichanov 2013.

***Aphrosylus raptor* Haliday, 1851.**

Parent 1929, **AP**, Mogador; Vaillant 1955; Dakki 1998; Grichanov 2007. Grichanov 2013, **AP**, Mogador.

***Aphrosylus temaranus* Vaillant, 1955.**

Vaillant 1955, **AP**, Temara; Dakki 1998; Grichanov 2013.

***Aphrosylus venator* Loew, 1857.**

Séguy 1930, **Rif**, Tanger; Dakki 1998.

***Argyra* Macquart, 1834.**

***Argyra argentina* Meigen, 1824.**

Grichanov 2007; Koçak & Kemal 2010, 2015.

***Argyra argyria* (Meigen, 1824).**

Grichanov 2007; Koçak & Kemal 2010, 2015.

***Argyra biseta* Parent, 1929.**

Parent 1929, **Rif**, Tanger; Vaillant 1955; Dakki 1998; Grichanov 2013, **Rif**, Tanger.

***Argyra grata* Loew, 1857.**

Grichanov 2006, 2007; Grichanov 2013.

Dolichopodinae***Dolichopus* Latreille, 1796.*****Dolichopus griseipennis* Stannius, 1831.**

Séguy 1930, **Rif**, Tanger; Dakki 1998; Mirceni & Pârvu 2009; Grichanov 2006, 2007; Koçak & Kemal 2010, 2015.

***Dolichopus scutopilosus* Parent, 1933.**

Parent 1933, **HA**, Arround.

***Dolichopus signifer* Haliday, 1832.**

Séguy 1930, **MA**, Ras El Ma; Vaillant 1950; Dakki 1998; Grichanov 2006, 2007; Koçak & Kemal 2010, 2015.

Hercostomus* Loew, 1857.**Hercostomus discriminatus* Parent, 1925.**

Vaillant 1950, **Rif**, Tanger.

***Hercostomus exarticulatus* (Loew, 1857).**

Vaillant 1956, **HA**, Lac Tamhda (Anremer), Aguelmous; Grichanov 2007.

***Hercostomus excipiens* Becker, 1907.**

Séguy 1930, **Rif**, Oued Judios (Tanger); Dakki 1998.

***Hercostomus germanus* (Wiedemann, 1817).**

Grichanov 2006, 2007; Koçak & Kemal 2010, 2015 - MNHN (**Rif**, Chefchaouen, Ketama).

***Hercostomus longiventris* (Loew, 1857).**

Vaillant 1956, **HA**, Lac Tamhda (Anremer), Izourar; Grichanov 2007; Koçak & Kemal 2010, 2015.

***Hercostomus maroccanus* Parent, 1929.**

Parent 1929, **Rif**, Tanger; Dakki 1998, **Rif**.

Micromorphus* Mik, 1878.**Micromorphus albipes* (Zetterstedt, 1843).**

Grichanov 2006, 2007; Pârvu & Zaharia 2007; Koçak & Kemal, 2015.

Platyopsis* Parent, 1929**Platyopsis maroccanus* (Parent, 1929).**

Vaillant 1950, **Rif**, Tanger.

Orthochile* Berthold, 1827.**Orthochile nigrocaerulea* Latreille, 1779**

Séguy 1930, **Rif**, Oued Judios (Tanger); Dakki 1998.

Sybistroma* Meigen, 1824.**Sybistroma dufouri* Macquart, 1838.**

Becker & Stein 1913, **Rif**, Tanger; Grichanov 2007; Koçak & Kemal 2010.

***Sybistroma obscurellus* Fallén, 1823.**

=*Hypophyllus obscurellus* Fallén, in Dakki 1998: 62
Dakki 1998.

Tachytrechus* Haliday, 1851.**Tachytrechus insignis* (Stannius, 1831).**

Séguy 1930, **Rif**, Tanger, **HA**, Aguerd el Had, Talekjount (1000-1100m); Vaillant 1950; 1956, **HA**, Lac Tamhda (Anremer); Dakki 1998; Grichanov 2006, 2007; Pârvu & Zaharia 2007; Popescu-Mirceni 2012, **AP**, Merja Zerga; Koçak & Kemal 2010, 2013, 2015; Grichanov 2013.

***Tachytrechus notatus* (Stannius, 1831).**

Vaillant 1950, 1956, **HA**, Lac Tamhda (Anremer); Grichanov 2013.

***Tachytrechus planitarsis* Becker, 1907.**

Vaillant 1950, **HA**, Touggourt.

Hydrophorinae***Anahydrophorus* Becker, 1917.*****Anahydrophorus cinereus* (Fabricius, 1805).**

Séguy 1930, **Rif**, Tanger; Vaillant 1955, **AP**, Temara, Port-Lyautey; Boumezzough & Vaillant 1986; Dakki 1998 - MNHN (**AP**, Skhirat).

Hydrophoprus* Fallén, 1823.**Hydrophorus balticus* (Meigen, 1824).**

Vaillant 1956, **HA**, Toubkal, Lac Tamhda (Anremer), Oukaimeden, Izourar; Boumezzough & Vaillant 1986, **HA**, Djebel Toubkal (3100m); Dakki 1998.

***Hydrophorus bisetus* Loew, 1857.**

Séguy 1930, **Rif**, Tandja el Balia (Tanger); Dakki 1998.

***Hydrophorus nilicola* Parent, 1927.**

Boumezzough & Vaillant 1986, **MA**, Tizi n'Imdrhas (1800m), **HA**, Oued N'fis (650m), near Agadir N'oussbai (400m); Dakki 1998.

***Hydrophorus oceanus* (Macquart, 1838).**

Vaillant 1955, **AP**, Port-Lyautey; Boumezzough & Vaillant 1986, **AP**, beach of Rabat; Dakki 1998.

***Hydrophorus praecox* (Lehmann, 1822).**

Séguy 1941, **HA**, Toubkal (2500m); Boumezzough & Vaillant 1986, **HA**, Lac Tamhda, Lac Tamdhanit (Massif Anremer: 2900m), Lac d'Izourar (Massif Azourki: 2650m); Dakki 1998. Koçak & Kemal, 2015.

***Hydrophorus viridis* (Meigen, 1824).**

Boumezzough & Vaillant 1986, **HA**; Dakki 1998.

Liancalus* Loew, 1857.**Liancalus virens* (Scopoli, 1763).**

Vaillant 1956, **HA**, Toubkal, Assif Tassouat (M'Goum), Aguelmous, Sidi Chamarouch, Imi N'Ifri; Boumezzough & Vaillant 1986, **HA**, Tahanaout (750m), Adrar Anremer (2900m), **AA**, Djebel Siroua (3000m); Dakki 1998; Grichanov 2006, 2007; Koçak & Kemal 2010, 2013, 2015 - MNHN (**AP**, Tifni (south)), PCKK (**Rif**, NPB; M.J. Ebejer det.).

Machaerium* Haliday, 1832.**Machaerium maritimae* Haliday, 1832.**

Séguy 1930, **Rif**, Tanger; Dakki 1998 - MNHN (**AP**, Oued Bouregreg).

Thinophilus* Wahlberg, 1844.**Thinophilus* (*Schoenophilus*) *versutus* Haliday, 1851.**

Pârvu et al. 2006, **AP**, Merja Zerga; Pârvu & Zaharia 2007; Grichanov 2006, 2007; Popescu-Mirceni 2012; Koçak & Kemal 2013.

***Thinophilus* (*Thinophilus*) *flavipalpis* (Zetterstedt, 1843).**

Pârvu et al. 2006, **AA**, Lac Edehby, Ouarzazate; Popescu-Mirceni 2012.

***Thinophilus* (*Thinophilus*) *mirandus* Becker, 1907.**

Grichanov 2007.

Medeterinae***Medetera* Fisher, 1819.*****Medetera petrophila* Kowarz, 1877.**

Grichanov 2006, 2007; Koçak & Kemal, 2015.

***Medetera varvara* Grichanov & Vikhrev, 2009.**

Grichanov & Vikhrev 2009, **AP**, sand dune.

***Medetara diadema* (Linnaeus, 1767).**

=*Medeterus* (cf. *diadema*), in Séguy 1953: 84. Séguy 1953, **AP**, Rabat.

Thrypticus* Gerstäcker, 1864.**Thrypticus bellus* Loew, 1869**

Séguy 1930, **EM**, Dayat Sidi Kacem; Dakki 1998.

Neurigoninae***Neurigona Rondani, 1856.******Neurigona punctifera* Becker, 1907.**

Rif, Azilane (Talasseltane: 1200m), M.J. Ebejer det – PCKK.

***Neurigona solodovnikovi* Crichanov, 2010.**

Crichanov, 2010, **AP**, 40 km S Larache.

Parathalassiinae

***Microphorella* Becker, 1909.**

***Microphorella ulrichi* Gatt, 2003**

Gatt 2003, **Rif**, Tanger, Oued Armal (Ksar Sghir).

Rhaphiinae

***Rhaphium* Meigen, 1803.**

***Rhaphium appendiculatum* Zetterstedt, 1849**

=*Hercostomus appendiculatus* Loew, in Dakki 1998: 62

Dakki 1998; Pârvu 1997; Grichanov 2006, 2007; Mirceni & Pârvu 2009; Koçak & Kemal 2013, 2015.

***Rhaphium caliginosum* Meigen, 1824.**

Grichanov 2007; Koçak & Kemal 2013, 2015.

***Rhaphium fascipes* (Meigen, 1824).**

Grichanov 2007; Koçak & Kemal 2013.

***Rhaphium pectinatum* (Loew, 1859).**

=*Xiphamdrium pectinatum* Becker, in Dakki 1998: 62.

Vaillant 1956, **AP**, Rabat, **HA**, Oukaïmeden; Dakki 1998 - MHNH (**AP**, Rabat).

Sciapodinae

***Sciapus* Zeller, 1842.**

***Sciapus euzonus* (Loew, 1859).**

=*Psilopus euzonus* Loew, in Dakki 1998: 62

Séguy 1930, **Rif**, Tanger; Séguy 1941, **HA**, Taroudant; Dakki 1998; Grichanov 2007.

***Sciapus longulus* (Fallén, 1823).**

Pârvu et al. 2006, **AP**, Merja Zerga; Popescu-Mirceni 2012.

Sympycninae

***Campsicnemus* Haliday in Walker, 1851.**

***Campsicnemus crinitarsis* Strobl, 1906.**

Dakki 1998; Grichanov 2012, **AP**, Essaouira – PCKK (**Rif**, Oued Amsa, M.J. Ebejer det).

***Campsicnemus curvipes* (Fallén, 1823).**

Dakki 1998; Pârvu & Zaharia 2007; Grichanov 2007, 2012; Koçak & Kemal 2013.

***Campsicnemus magius* (Loew, 1845).**

Pârvu et al. 2006, **AA**, Lac Edehby, Ouarzazate; Popescu-Mirceni 2012; Grichanov 2012.

***Syntormon* Loew, 1857.**

***Syntormon aulicum* Meigen, 1824.**

=*Eutarsus aulicus* Meigen, in Séguy 1930: 125.

Séguy 1930, **Rif**, Tanger; Vaillant 1950, 1952, 1956, **HA**, Imi N'Ifri; Dakki 1998; Grichanov 2006, 2007; Naglis 2009; Koçak & Kemal 2013.

***Syntormon codinai* Parent, 1924.**

Grichanov & Negrobov 2013, **Rif**, Cap Spartel (Tanger); Naglis 2009; Koçak & Kemal 2013, 2015.

***Syntormon denticulatus* (Zetterstedt, 1843).**

Séguy 1930, **Rif**, Tanger; Dakki 1998.

***Syntormon mikii* Strobl, 1899.**

Grichanov 2006, 2007; Kechev 2012; Grichanov & Negrobov 2013.

***Syntormon monile* (Haliday, 1851).**

Grichanov 2007; Grichanov & Negrobov 2013, Naglis 2009; Koçak & Kemal 2013, 2015.

***Syntormon pallipes* (Fabricius, 1794).**

Dakki 1998; Pârvu & Zaharia 2007; Naglis 2009; Grichanov & Negrobov 2013.

***Syntormon pumilum* (Meigen, 1824).**

Pârvu et al. 2006, **AA**, Lac Edehby, Ouarzazate; Grichanov 2007; Naglis 2009; Popescu-Mirceni 2012; Koçak & Kemal 2013, 2015; Grichanov & Negrobov 2013.

***Syntormon rufipes* (Meigen, 1824).**

Pârvu et al. 2006, **AA**, Lac Edehby, Ouarzazate; Popescu-Mirceni 2012.

***Syntormon zelleri* (Loew, 1850).**

Vaillant 1956, **HA**, Oukaimeden, Izourar; Pârvu et al. 2006, **AP**, Merja Zerga; Popescu-Mirceni 2012.

***Teuchophorus* Loew, 1857.**

***Teuchophorus spinigerellus* (Zetterstedt, 1843).**

Pârvu et al. 2006, **AA**, Lac Edehby, Ouarzazate; Popescu-Mirceni 2012

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